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**D3454-3****Job Sheet 194480****Part No:** D3454-3**Job Qty:** 20 pcs**Part Name:** Bushing**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 5/3/19**Job Tracking No:****Due Date:** 6/12/19**Created By:** Marie Lajeunesse**Type:** Stock**Description:****Note:** DWG REV B IPP rev. A 05.11.17 new issue EC**Ship Via:****Bill of Materials****Job Routing**

| Op<br>No | Operation                   | Qty    | Start Date | Due<br>Date | Standard     |            | Workcenter/Supplier   |           | Sign-off |
|----------|-----------------------------|--------|------------|-------------|--------------|------------|-----------------------|-----------|----------|
|          |                             |        |            |             | Setup<br>Hrs | Run<br>Hrs | Workcenter / Supplier | Lead Time |          |
| 100      | Hardinge - 1                | 20 pcs | 6/12/19    | 6/12/19     | 0.00         | 1.67       | Hardinge - 1          |           | 19/06/30 |
| 120      | QC 8                        | 20 pcs | 6/12/19    | 6/12/19     | 0.00         | 0.00       | QC 8 - 12             |           | 19/07/02 |
|          |                             |        |            |             |              |            | QC 8 - 14             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 17             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 20             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 25             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 3              |           |          |
|          |                             |        |            |             |              |            | QC 8 - 32             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 33             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 35             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 39             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 4              |           |          |
|          |                             |        |            |             |              |            | QC 8 - 44             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 45             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 49             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 58             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 8              |           |          |
|          |                             |        |            |             |              |            | QC 8 - 9              |           |          |
|          |                             |        |            |             |              |            | QC 8 - 68             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 67             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 1 (A)          |           |          |
|          |                             |        |            |             |              |            | QC 8 - 47             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 40             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 52             |           |          |
|          |                             |        |            |             |              |            | QC 8 - 23             |           |          |
| 150      | Packaging 3-1 - Stock - B4B | 20 pcs | 6/12/19    | 6/12/19     | 0.00         | 0.00       | Packaging 3 - 1 - B4B |           |          |
|          |                             |        |            |             |              |            | Packaging 3 - 2 - B4B |           |          |
|          |                             |        |            |             |              |            | Packaging 3 - 3 - B4B |           |          |
|          |                             |        |            |             |              |            | Packaging 3 - 4 - B4B |           |          |
|          |                             |        |            |             |              |            | Packaging 3 - 5 - B4B |           |          |
|          |                             |        |            |             |              |            | Packaging 3 - 6 - B4B |           |          |

Plex 5/3/19 8:22 AM Dart.lajeunesse.marie

|                                                                                                                                                                                                                                |                       |                                |                  |                        |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------|------------------|------------------------|-------------------------|
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 7 - B4B  |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 8 - B4B  |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 9 - B4B  |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 10 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 11 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 12 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 13 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 14 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 15 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 16 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 17 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 18 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 19 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 20 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 21 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 22 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 23 - B4B | PC 57036                |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 24 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 25 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 26 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 27 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 28 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 29 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 30 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 31 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 32 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 33 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 34 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 35 - B4B |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | Packaging 3 - 36 - B4B |                         |
| 160 QC 21 - SA                                                                                                                                                                                                                 | 20 pcs                | 6/12/19                        | 0.00 0.00        | QC 21 - SA - 21        |                         |
|                                                                                                                                                                                                                                |                       |                                |                  | QC 21 - SA - 70        | DAS 21 JUL 02 2019      |
|                                                                                                                                                                                                                                |                       |                                |                  | QC 21 - SA - 53        | 9:55                    |
| Part Op 100 - 1-TURN AS PER FOLIO FA571 & DWG D3454 ,<br>Descriptions: 120 - (QC8- Inspect parts - second check)<br>150 - (Identify as per dwg & Stock Location: _____)<br>160 - (QC21- Final Inspection - Work Order Release) |                       |                                |                  |                        |                         |
| <b>Job BOM</b>                                                                                                                                                                                                                 |                       |                                |                  |                        |                         |
| <b>Part / Item</b>                                                                                                                                                                                                             | <b>Component Name</b> | <b>Quantity</b>                | <b>Operation</b> | <b>Container</b>       |                         |
| M303R0.750                                                                                                                                                                                                                     | 303 Round Bar 0.750   | 1.2000 ft (.06 ea)             | 100-Hardinge - 1 | 5152404                |                         |
| <b>Job Allocations</b>                                                                                                                                                                                                         |                       |                                |                  |                        |                         |
| <b>Operation</b>                                                                                                                                                                                                               | <b>Component Part</b> | <b>Required</b>                | <b>Inventory</b> | <b>Allocated</b>       |                         |
| 100-Hardinge - 1                                                                                                                                                                                                               | M303R0.750            | 1                              | 92               | 0                      |                         |
| <b>Part Specifications</b>                                                                                                                                                                                                     |                       |                                |                  |                        |                         |
| <b>Spec No</b>                                                                                                                                                                                                                 | <b>Description</b>    | <b>Target/Tolerance</b>        | <b>Limits</b>    | <b>Type</b>            | <b>Special Comments</b> |
| 1                                                                                                                                                                                                                              | Bushing               | 0.316inches + 0.005<br>- 0.000 | 0.321<br>0.316   |                        |                         |
| 2                                                                                                                                                                                                                              | Bushing               | 0.435inches + 0.000<br>- 0.005 | 0.435<br>0.430   |                        |                         |
| 3                                                                                                                                                                                                                              | Bushing               | 0.400inches + 0.005<br>- 0.000 | 0.405<br>0.400   |                        |                         |
| 4                                                                                                                                                                                                                              | Bushing               | 0.060inches + 0.010<br>- 0.000 | 0.070<br>0.060   |                        |                         |
| 5                                                                                                                                                                                                                              | Bushing               | 0.750inches ± 0.030            | 0.780<br>0.720   |                        |                         |

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |              |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |              |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        | MRB (QSI042) |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Disposition            |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Completed By           |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Lead hand / Supervisor |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | QC / QA Coordinator    |              |  |
| <b>Root Cause</b><br><br><div style="display: flex; flex-direction: column; align-items: flex-start;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Preservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |                        |              |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |              |  |



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**Container No: S194942**



**Part: D3454-3**

**Job No: 194480**

**Serial No/Batch: S194942**

**Revision:**

**Inspector:**

**Exp Date:**

**Instructions: Various STC's**

**Date: 06/30/19**